



## User Guide to Standard Plans Section S OVERHEAD SIGNS – VERSATILE TRUSS

### Appendix A: Verifying the Maximum Allowed Sign Depth on an Existing Versatile Truss

#### Overload Warning:

Placing a sign panel larger than what the sign structure was designed for may overload the structure. When replacing existing sign panels or adding new sign panels, the sign panel depth may not be greater than the maximum sign panel depth depicted in the as-builts from when the overhead sign structure was originally constructed.

#### Standard Plan Owner Consultation:

Consult with the Office of Design and Technical Services (ODTS) if there are any doubts or uncertainties as to the maximum sign panel depth allowed on an existing overhead sign structure.

#### Verifying the Maximum Sign Depth Allowed on an Existing Versatile Truss:

1. Obtain basic sign structure information from the identification plate located near the posts' base.

Near the base of each post on the Versatile Truss is an identification plate that provides the contract number and the Standard Plan year for when the sign structure was constructed. Post type and the post clear height,  $h$ , for each post will be listed as well.

2. Obtain the original as-builts for the Versatile Truss.

Using the contract number locate the as-builts. The required as-builts are for the original construction of the sign structure.

3. Determine the maximum sign panel depth from the original as-builts.

The sign panel dimensions are depicted on the as-builts. The maximum sign panel depth allowed will be the largest sign panel height which was the basis for sizing the truss members and post type. Please note, the exit plaque height (up to 60 inches) is not counted as part of the sign panel height. Allowances for exit plaques have already been factored into the design of the sign structure. The number of exit plaques on a sign structure and their size may not exceed the requirements called out in the Standard Plans.

4. Confirm the maximum sign panel depth based on the Standard Plans.

- a) From the as-builts and identification plate, determine the following for the Versatile Truss:

- Sign Panel Depth,  $D$



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- Truss Frame Depth
  - Longer Arm or Main Span Length
  - Post Clear Height,  $h$  (use the largest “ $h$ ” for a two-post type structure)
  - Post Type
- b) Using the “Post Selection Table” on sheets S102 and S107, confirm the Post Type needed based on Sign Panel Depth, Longer Arm/Main Span Length, and Post Clear Height matches the Post Type identified on the as-builts.
- c) Using the “Truss Frame Depth And Vertical Angle Spacing Table” on sheets S101 and S106, confirm that the Sign Panel Depth does not exceed the “Maximum Sign Panel Depth” for the truss Frame Depth.